



Proper Battery Disposal Saves Money and Reduces Hazardous Waste

Prepared by Shirli Axelrod, Seattle Public Utilities, September 2001

Flashlights, radios, cellular phones, pagers, computers, cameras, cordless tools, emergency lighting, forklifts, cars, and electrical substations. All of these use batteries for power to start up or to run. And the batteries range from tiny buttons to large supply units, in many shapes and with various chemical make-ups.

Of the thousands of batteries the City buys annually, what happens to them when they die? The battery story contains both recycling successes and pollution concerns. More and more, battery and appliance manufacturers are taking responsibility for recycling — something purchasers can ask for when we buy batteries or the tools that use them. Here are some highlights:

Alkaline batteries — A, AA, C, D, E cells — are the most numerous and shortest-lived. The City buys thousands of these for pagers, clocks, and flashlights. Once a significant source of mercury in landfills, alkaline batteries are now made without mercury. However, they are still hazardous waste because of corrosivity. Recycling through the City's hazardous waste contracts is available for \$1.56 per kilogram, but many are routinely disposed of in the trash.

Ni-Cad (Nickel-Cadmium) batteries are rechargeable and recyclable. Ni-Cad manufacturers pay for recycling, in a show of "producer responsibility," and City Departments can obtain pre-paid shipping containers (\$20 per 40 pounds). The Nickel and Cadmium are reclaimed to be used again.

Lead-Acid batteries, such as vehicle batteries, and a growing number of appliance and power storage batteries, contain lead and an acid gel. The City disposes of thousands of these each year. All are recyclable. Every supplier of new vehicle batteries takes some or all old lead-acid batteries for recycling. Some pay \$1 per battery. The lead is reclaimed to be used again.

Some of the facilities which reclaim metals have had pollution problems, so we want to know about the practices at the recyclers and smelters, as well as the price we receive or pay for spent batteries.

A subcommittee of the Communications Commodities Team is looking into increasing our battery recycling. For more information about batteries at work, contact environmental staff in your department or Shirli Axelrod (4-7804). For batteries at home, take Ni-Cads and Lead-Acid batteries back where you bought them, and use rechargeables if you can to reduce waste disposal. Alkaline batteries from your household are allowed in the garbage.

Contact Shirli Axelrod (206) 684-7804